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Asn Ile Asp Asp Ala Gly Ile Tyr Lys Cys Val Val Thr Gly Glu Asp
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ctt acc tgt gaa gcc tcc gga gac ccc att ccc tcc atc acc tgg agg     1063
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act tct acc cgg aac atc agc agc gaa gaa aag act ctg gat ggg cac     1111
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Pro Ser Ile Asp Gln Val Glu Pro Tyr Ser Ser Thr Ala Gln Val Gln
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Phe Asp Glu Pro Glu Ala Thr Gly Gly Val Pro Ile Leu Lys Tyr Lys
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gct gag tgg aga gca gtg ggt gaa gaa gta tgg cat tcc aag tgg tat   1687
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        585                 590                 595

caa ggg gaa ccc agt gca cct aag ctc gaa ggg cag atg gga gag gat   1879
Gln Gly Glu Pro Ser Ala Pro Lys Leu Glu Gly Gln Met Gly Glu Asp
    600                 605                 610

gga aac tct att aaa gtg aac ctg atc aag cag gat gac ggc ggc tcc   1927
Gly Asn Ser Ile Lys Val Asn Leu Ile Lys Gln Asp Asp Gly Gly Ser
615                 620                 625                 630

ccc atc aga cac tat ctg gtc agg tac cga gcg ctc tcc tcc gag tgg   1975
Pro Ile Arg His Tyr Leu Val Arg Tyr Arg Ala Leu Ser Ser Glu Trp
                635                 640                 645

aaa cca gag atc agg ctc ccg tct ggc agt gac cac gtc atg ctg aag   2023
Lys Pro Glu Ile Arg Leu Pro Ser Gly Ser Asp His Val Met Leu Lys
            650                 655                 660

tcc ctg gac tgg aat gct gag tat gag gtc tac gtg gtg gct gag aac   2071
Ser Leu Asp Trp Asn Ala Glu Tyr Glu Val Tyr Val Val Ala Glu Asn
        665                 670                 675
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cag caa gga aaa tcc aag gcg gct cat ttt gtg ttc agg acc tcg gcc 2119
Gln Gln Gly Lys Ser Lys Ala Ala His Phe Val Phe Arg Thr Ser Ala
680 685 690

cag ccc aca gcc atc cca gcc aac ggc agc ccc acc tca ggc ctg agc 2167
Gln Pro Thr Ala Ile Pro Ala Asn Gly Ser Pro Thr Ser Gly Leu Ser
695 700 705 710

acc ggg gcc atc gtg ggc atc ctc atc gtc atc ttc gtc ctg ctc ctg 2215
Thr Gly Ala Ile Val Gly Ile Leu Ile Val Ile Phe Val Leu Leu Leu
715 720 725

gtg gtt gtg gac atc acc tgc tac ttc ctg aac aag tgt ggc ctg ttc 2263
Val Val Val Asp Ile Thr Cys Tyr Phe Leu Asn Lys Cys Gly Leu Phe
730 735 740

atg tgc att gcg gtc aac ctg tgt gga aaa gcc ggg ccc ggg gcc aag 2311
Met Cys Ile Ala Val Asn Leu Cys Gly Lys Ala Gly Pro Gly Ala Lys
745 750 755

ggc aag gac atg gag gag ggc aag gcc gcc ttc tcg aaa gat gag tcc 2359
Gly Lys Asp Met Glu Glu Gly Lys Ala Ala Phe Ser Lys Asp Glu Ser
760 765 770

aag gag ccc atc gtg gag gtt cga acg gag gag gag agg acc cca aac 2407
Lys Glu Pro Ile Val Glu Val Arg Thr Glu Glu Glu Arg Thr Pro Asn
775 780 785 790

cat gat gga ggg aaa cac aca gag ccc aac gag acc acg cca ctg acg 2455
His Asp Gly Gly Lys His Thr Glu Pro Asn Glu Thr Thr Pro Leu Thr
795 800 805

gag ccc gag aag ggc ccc gta gaa gca aag cca gag tgc cag gag aca 2503
Glu Pro Glu Lys Gly Pro Val Glu Ala Lys Pro Glu Cys Gln Glu Thr
810 815 820

gaa acg aag cca gcg cca gcc gaa gtc aag acg gtc ccc aat gac gcc 2551
Glu Thr Lys Pro Ala Pro Ala Glu Val Lys Thr Val Pro Asn Asp Ala
825 830 835

aca cag aca aag gag aac gag agc aaa gca tga tgggtgaaga gaaccgagca 2604
Thr Gln Thr Lys Glu Asn Glu Ser Lys Ala
840 845

aagatcaaaa taaaaagtga cacagcagc 2633

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<211> 848
<212> PRT
<213> Homo sapiens

<400> 8

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20 25 30

Val Gly Glu Ser Lys Phe Phe Leu Cys Gln Val Ala Gly Asp Ala Lys
35 40 45

Asp Lys Asp Ile Ser Trp Phe Ser Pro Asn Gly Glu Lys Leu Thr Pro
50 55 60

Asn Gln Gln Arg Ile Ser Val Val Trp Asn Asp Asp Ser Ser Ser Thr
65 70 75 80

Leu Thr Ile Tyr Asn Ala Asn Ile Asp Asp Ala Gly Ile Tyr Lys Cys
85 90 95

Val Val Thr Gly Glu Asp Gly Ser Glu Ser Glu Ala Thr Val Asn Val
100 105 110

Lys Ile Phe Gln Lys Leu Met Phe Lys Asn Ala Pro Thr Pro Gln Glu
115 120 125

Phe Arg Glu Gly Glu Asp Ala Val Ile Val Cys Asp Val Val Ser Ser
130 135 140

Leu Pro Pro Thr Ile Ile Trp Lys His Lys Gly Arg Asp Val Ile Leu
145 150 155 160

Lys Lys Asp Val Arg Phe Ile Val Leu Ser Asn Asn Tyr Leu Gln Ile
165 170 175

Arg Gly Ile Lys Lys Thr Asp Glu Gly Thr Tyr Arg Cys Glu Gly Arg
180 185 190

Ile Leu Ala Arg Gly Glu Ile Asn Phe Lys Asp Ile Gln Val Ile Val
195 200 205

Asn Val Pro Pro Thr Ile Arg Ala Arg Gln Asn Ile Val Asn Ala Thr
210 215 220

Ala Asn Leu Gly Gln Ser Val Thr Leu Val Cys Asp Ala Glu Arg Phe
225 230 235 240

Pro Glu Pro Thr Met Ser Trp Thr Lys Asp Gly Glu Gln Ile Glu Gln
245 250 255

Glu Glu Asp Asp Glu Lys Tyr Ile Phe Ser Asp Asp Ser Ser Gln Leu
260 265 270

Thr Ile Lys Lys Val Asp Lys Asn Asp Glu Ala Glu Tyr Ile Cys Ile
275 280 285

Ala Glu Asn Lys Ala Gly Glu Gln Asp Ala Thr Ile His Leu Lys Val
290 295 300

Phe Ala Lys Pro Lys Ile Thr Tyr Val Glu Asn Gln Thr Ala Met Glu
305 310 315 320

Leu Glu Glu Gln Val Thr Leu Thr Cys Glu Ala Ser Gly Asp Pro Ile
325 330 335

Pro Ser Ile Thr Trp Arg Thr Ser Thr Arg Asn Ile Ser Ser Glu Glu
340 345 350

Lys Thr Leu Asp Gly His Met Val Val Arg Ser His Ala Arg Val Ser
355 360 365

Ser Leu Thr Leu Lys Ser Ile Gln Tyr Thr Asp Ala Gly Glu Tyr Ile
370 375 380

Cys Thr Ala Ser Asn Thr Ile Gly Gln Asp Ser Gln Ser Met Tyr Leu
385 390 395 400

Glu Val Gln Tyr Ala Pro Lys Leu Gln Gly Pro Val Ala Val Tyr Thr
405 410 415

Trp Glu Gly Asn Gln Val Asn Ile Thr Cys Glu Val Phe Ala Tyr Pro
420 425 430

Ser Ala Thr Ile Ser Trp Phe Arg Asp Gly Gln Leu Leu Pro Ser Ser
435 440 445

Asn Tyr Ser Asn Ile Lys Ile Tyr Asn Thr Pro Ser Ala Ser Tyr Leu
450 455 460

Glu Val Thr Pro Asp Ser Glu Asn Asp Phe Gly Asn Tyr Asn Cys Thr
465 470 475 480

Ala Val Asn Arg Ile Gly Gln Glu Ser Phe Glu Phe Ile Leu Val Gln
485 490 495

Ala Asp Thr Pro Ser Ser Pro Ser Ile Asp Gln Val Glu Pro Tyr Ser
500 505 510

Ser Thr Ala Gln Val Gln Phe Asp Glu Pro Glu Ala Thr Gly Gly Val
515 520 525

Pro Ile Leu Lys Tyr Lys Ala Glu Trp Arg Ala Val Gly Glu Glu Val
530 535 540

Trp His Ser Lys Trp Tyr Asp Ala Lys Glu Ala Ser Met Glu Gly Ile
545 550 555 560

Val Thr Ile Val Gly Leu Lys Pro Glu Thr Thr Tyr Ala Val Arg Leu
565 570 575

Ala Ala Leu Asn Gly Lys Gly Leu Gly Glu Ile Ser Ala Ala Ser Glu
580 585 590

Phe Lys Thr Gln Pro Val Gln Gly Glu Pro Ser Ala Pro Lys Leu Glu
595 600 605

Gly Gln Met Gly Glu Asp Gly Asn Ser Ile Lys Val Asn Leu Ile Lys
610 615 620

Gln Asp Asp Gly Gly Ser Pro Ile Arg His Tyr Leu Val Arg Tyr Arg
625 630 635 640

Ala Leu Ser Ser Glu Trp Lys Pro Glu Ile Arg Leu Pro Ser Gly Ser
645 650 655

Asp His Val Met Leu Lys Ser Leu Asp Trp Asn Ala Glu Tyr Glu Val
660 665 670

Tyr Val Val Ala Glu Asn Gln Gln Gly Lys Ser Lys Ala Ala His Phe
675 680 685

Val Phe Arg Thr Ser Ala Gln Pro Thr Ala Ile Pro Ala Asn Gly Ser
690 695 700

Pro Thr Ser Gly Leu Ser Thr Gly Ala Ile Val Gly Ile Leu Ile Val
705 710 715 720

Ile Phe Val Leu Leu Leu Val Val Val Asp Ile Thr Cys Tyr Phe Leu
725 730 735

Asn Lys Cys Gly Leu Phe Met Cys Ile Ala Val Asn Leu Cys Gly Lys
740 745 750

Ala Gly Pro Gly Ala Lys Gly Lys Asp Met Glu Glu Gly Lys Ala Ala
755 760 765

Phe Ser Lys Asp Glu Ser Lys Glu Pro Ile Val Glu Val Arg Thr Glu
770 775 780

Glu Glu Arg Thr Pro Asn His Asp Gly Gly Lys His Thr Glu Pro Asn
785 790 795 800

Glu Thr Thr Pro Leu Thr Glu Pro Glu Lys Gly Pro Val Glu Ala Lys
805 810 815

Pro Glu Cys Gln Glu Thr Glu Thr Lys Pro Ala Pro Ala Glu Val Lys
820 825 830

Thr Val Pro Asn Asp Ala Thr Gln Thr Lys Glu Asn Glu Ser Lys Ala
835 840 845

<210> 9
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<212> DNA
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<223>

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gccactctct gccgcttggg ttgggcgaaa gccaggaccg tgccgcgcca ccgccaggat 120

atg gag cta ctg tcg cca ccg ctc cgc gac gta gac ctg acg gcc ccc 168
Met Glu Leu Leu Ser Pro Pro Leu Arg Asp Val Asp Leu Thr Ala Pro

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     1               5                  10                  15

     gac ggc tct ctc tgc tcc ttt gcc aca acg gac gac ttc tat gac gac      216
     Asp Gly Ser Leu Cys Ser Phe Ala Thr Thr Asp Asp Phe Tyr Asp Asp
 5               20                  25                  30

     ccg tgt ttc gac tcc ccg gac ctg cgc ttc ttc gaa gac ctg gac ccg      264
     Pro Cys Phe Asp Ser Pro Asp Leu Arg Phe Phe Glu Asp Leu Asp Pro
             35                  40                  45
10
     cgc ctg atg cac gtg ggc gcg ctc ctg aaa ccc gaa gag cac tcg cac      312
     Arg Leu Met His Val Gly Ala Leu Leu Lys Pro Glu Glu His Ser His
         50                  55                  60

15   ttc ccc gcg gcg gtg cac ccg gcc ccg ggc gca cgt gag gac gag cat      360
     Phe Pro Ala Ala Val His Pro Ala Pro Gly Ala Arg Glu Asp Glu His
     65                  70                  75                  80

     gtg cgc gcg ccc agc ggg cac cac cag gcg ggc cgc tgc cta ctg tgg      408
20   Val Arg Ala Pro Ser Gly His His Gln Ala Gly Arg Cys Leu Leu Trp
                     85                  90                  95

     gcc tgc aag gcg tgc aag cgc aag acc acc aac gcc gac cgc cgc aag      456
     Ala Cys Lys Ala Cys Lys Arg Lys Thr Thr Asn Ala Asp Arg Arg Lys
25               100                 105                 110

     gcc gcc acc atg cgc gag cgg cgc cgc ctg agc aaa gta aat gag gcc      504
     Ala Ala Thr Met Arg Glu Arg Arg Arg Leu Ser Lys Val Asn Glu Ala
             115                 120                 125
30
     ttt gag aca ctc aag cgc tgc acg tcg agc aat cca aac cag cgg ttg      552
     Phe Glu Thr Leu Lys Arg Cys Thr Ser Ser Asn Pro Asn Gln Arg Leu
         130                 135                 140

35   ccc aag gtg gag atc ctg cgc aac gcc atc cgc tat atc gag ggc ctg      600
     Pro Lys Val Glu Ile Leu Arg Asn Ala Ile Arg Tyr Ile Glu Gly Leu
     145                 150                 155                 160

     cag gct ctg ctg cgc gac cag gac gcc gcg ccc cct ggc gca gcc gcc      648
40   Gln Ala Leu Leu Arg Asp Gln Asp Ala Ala Pro Pro Gly Ala Ala Ala
                     165                 170                 175

     ttc tat gcg ccg ggc ccg ctg ccc ccg ggc cgc ggc ggc gag cac tac      696
     Phe Tyr Ala Pro Gly Pro Leu Pro Pro Gly Arg Gly Gly Glu His Tyr
45               180                 185                 190

     agc ggc gac tcc gac gcg tcc agc ccg cgc tcc aac tgc tcc gac ggc      744
     Ser Gly Asp Ser Asp Ala Ser Ser Pro Arg Ser Asn Cys Ser Asp Gly
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                195                 200                 205

atg atg gac tac agc ggc ccc ccg agc ggc gcc cgg cgg cgg aac tgc      792
Met Met Asp Tyr Ser Gly Pro Pro Ser Gly Ala Arg Arg Arg Asn Cys
    210                 215                 220

tac gaa ggc gcc tac tac aac gag gcg ccc agc gaa ccc agg ccc ggg      840
Tyr Glu Gly Ala Tyr Tyr Asn Glu Ala Pro Ser Glu Pro Arg Pro Gly
225                 230                 235                 240

aag agt gcg gcg gtg tcg agc cta gac tac ctg tcc agc atc gtg gag      888
Lys Ser Ala Ala Val Ser Ser Leu Asp Tyr Leu Ser Ser Ile Val Glu
                245                 250                 255

cgc atc tcc acc gag agc cct gcg gcg ccc gcc ctc ctg ctg gcg gac      936
Arg Ile Ser Thr Glu Ser Pro Ala Ala Pro Ala Leu Leu Leu Ala Asp
            260                 265                 270

gtg cct tct gag tcg cct ccg cgc agg caa gag gct gcc gcc ccc agc      984
Val Pro Ser Glu Ser Pro Pro Arg Arg Gln Glu Ala Ala Ala Pro Ser
        275                 280                 285

gag gga gag agc agc ggc gac ccc acc cag tca ccg gac gcc gcc ccg     1032
Glu Gly Glu Ser Ser Gly Asp Pro Thr Gln Ser Pro Asp Ala Ala Pro
    290                 295                 300

cag tgc cct gcg ggt gcg aac ccc aac ccg ata tac cag gtg ctc tga     1080
Gln Cys Pro Ala Gly Ala Asn Pro Asn Pro Ile Tyr Gln Val Leu
305                 310                 315

gggggatgtg gccgcccaac cccgccaggg atggtgccct agggtccctc gcgcccaaaa    1140

gattgaactt aaatgccccc ctcccaacag cgctttaaaa gcgccatctc ttgaggtagg    1200

agaggcggag aactgaagtt tccgcccccc ccgacagggc aaggacacag cgcggttttt    1260

tccacgcagc acccttctcg gagacccatt gcgatggccg ctccgtgttc ctcggtgggc    1320

cagagctgaa ccttgagggg ctaggttcac gtttctcgcg ccctccatgg tgagaccctc    1380

gcagacctaa ccctgccccg ggatgcaccg gttatttggg ggggcgtgag acagtgcact    1440

ccggtcccaa atgtagcagg tgtaaccgta acccaccccc aacccgtttc ccggttcagg    1500

accacttttt gtaatacttt ttgtaatcta ttcctgtaaa taagagttcg tttgccagag    1560

aggagcccct ggggctgtat ttatctctga ggcagggtgt gtggtgctac agggaatttg    1620
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tacgtttata ccgcaggcgg gcgagccgcg ggcgctcgct caggtgatca aaataaaggc 1680

gctaatttat aa 1692

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Met Glu Leu Leu Ser Pro Pro Leu Arg Asp Val Asp Leu Thr Ala Pro
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Asp Gly Ser Leu Cys Ser Phe Ala Thr Thr Asp Asp Phe Tyr Asp Asp
20 25 30

Pro Cys Phe Asp Ser Pro Asp Leu Arg Phe Phe Glu Asp Leu Asp Pro
35 40 45

Arg Leu Met His Val Gly Ala Leu Leu Lys Pro Glu Glu His Ser His
50 55 60

Phe Pro Ala Ala Val His Pro Ala Pro Gly Ala Arg Glu Asp Glu His
65 70 75 80

Val Arg Ala Pro Ser Gly His His Gln Ala Gly Arg Cys Leu Leu Trp
85 90 95

Ala Cys Lys Ala Cys Lys Arg Lys Thr Thr Asn Ala Asp Arg Arg Lys
100 105 110

Ala Ala Thr Met Arg Glu Arg Arg Arg Leu Ser Lys Val Asn Glu Ala
115 120 125

Phe Glu Thr Leu Lys Arg Cys Thr Ser Ser Asn Pro Asn Gln Arg Leu
130 135 140

Pro Lys Val Glu Ile Leu Arg Asn Ala Ile Arg Tyr Ile Glu Gly Leu
145 150 155 160

Gln Ala Leu Leu Arg Asp Gln Asp Ala Ala Pro Pro Gly Ala Ala Ala
165 170 175

Phe Tyr Ala Pro Gly Pro Leu Pro Pro Gly Arg Gly Gly Glu His Tyr
180 185 190

Ser Gly Asp Ser Asp Ala Ser Ser Pro Arg Ser Asn Cys Ser Asp Gly
195 200 205

Met Met Asp Tyr Ser Gly Pro Pro Ser Gly Ala Arg Arg Arg Asn Cys
210 215 220

Tyr Glu Gly Ala Tyr Tyr Asn Glu Ala Pro Ser Glu Pro Arg Pro Gly
225 230 235 240

Lys Ser Ala Ala Val Ser Ser Leu Asp Tyr Leu Ser Ser Ile Val Glu
245 250 255

Arg Ile Ser Thr Glu Ser Pro Ala Ala Pro Ala Leu Leu Leu Ala Asp
260 265 270

Val Pro Ser Glu Ser Pro Pro Arg Arg Gln Glu Ala Ala Ala Pro Ser
275 280 285

Glu Gly Glu Ser Ser Gly Asp Pro Thr Gln Ser Pro Asp Ala Ala Pro
290 295 300

Gln Cys Pro Ala Gly Ala Asn Pro Asn Pro Ile Tyr Gln Val Leu
305 310 315

<210> 11
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<309> 2003-04-07
<313> (1)..(1427)

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                                                 Met Asp Val Met
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gat ggc tgc cag ttc tca cct tct gag tac ttc tac gac ggc tcc tgc      102
Asp Gly Cys Gln Phe Ser Pro Ser Glu Tyr Phe Tyr Asp Gly Ser Cys
5                  10                  15                  20

ata ccg tcc ccc gag ggt gaa ttt ggg gac gag ttt gtg ccg cga gtg      150
Ile Pro Ser Pro Glu Gly Glu Phe Gly Asp Glu Phe Val Pro Arg Val
                25                  30                  35

gct gcc ttc gga gcg cac aaa gca gag ctg cag ggc tca gat gag gac      198
Ala Ala Phe Gly Ala His Lys Ala Glu Leu Gln Gly Ser Asp Glu Asp
            40                  45                  50

gag cac gtg cga gcg cct acc ggc cac cac cag gct ggt cac tgc ctc      246
Glu His Val Arg Ala Pro Thr Gly His His Gln Ala Gly His Cys Leu
        55                  60                  65

atg tgg gcc tgc aaa gcc tgc aag agg aag tcc acc acc atg gat cgg      294
Met Trp Ala Cys Lys Ala Cys Lys Arg Lys Ser Thr Thr Met Asp Arg
    70                  75                  80

cgg aag gca gcc act atg cgc gag cgg agg cgc ctg aag aag gtc aac      342
Arg Lys Ala Ala Thr Met Arg Glu Arg Arg Arg Leu Lys Lys Val Asn
85                  90                  95                  100

cag gct ttc gaa acc ctc aag agg tgt acc acg acc aac ccc aac cag      390
Gln Ala Phe Glu Thr Leu Lys Arg Cys Thr Thr Thr Asn Pro Asn Gln
                105                 110                 115

agg ctg ccc aag gtg gag atc ctc agg aat gcc atc cgc tac atc gag      438
Arg Leu Pro Lys Val Glu Ile Leu Arg Asn Ala Ile Arg Tyr Ile Glu
            120                 125                 130
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agc ctg cag gag ttg ctg aga gag cag gtg gag aac tac tat agc ctg      486
Ser Leu Gln Glu Leu Leu Arg Glu Gln Val Glu Asn Tyr Tyr Ser Leu
        135                 140                 145

ccg gga cag agc tgc tcg gag ccc acc agc ccc acc tcc aac tgc tct      534
Pro Gly Gln Ser Cys Ser Glu Pro Thr Ser Pro Thr Ser Asn Cys Ser
    150                 155                 160

gat ggc atg ccc gaa tgt aac agt cct gtc tgg tcc aga aag agc agt      582
Asp Gly Met Pro Glu Cys Asn Ser Pro Val Trp Ser Arg Lys Ser Ser
165                 170                 175                 180

act ttt gac agc atc tac tgt cct gat gta tca aat gta tat gcc aca      630
Thr Phe Asp Ser Ile Tyr Cys Pro Asp Val Ser Asn Val Tyr Ala Thr
                185                 190                 195

gat aaa aac tcc tta tcc agc ttg gat tgc tta tcc aac ata gtg gac      678
Asp Lys Asn Ser Leu Ser Ser Leu Asp Cys Leu Ser Asn Ile Val Asp
            200                 205                 210

cgg atc acc tcc tca gag caa cct ggg ttg cct ctc cag gat ctg gct      726
Arg Ile Thr Ser Ser Glu Gln Pro Gly Leu Pro Leu Gln Asp Leu Ala
        215                 220                 225

tct ctc tct cca gtt gcc agc acc gat tca cag cct cga act cca ggg      774
Ser Leu Ser Pro Val Ala Ser Thr Asp Ser Gln Pro Arg Thr Pro Gly
    230                 235                 240

gct tct agt tcc agg ctt atc tat cat gtg cta tga actaattttc           820
Ala Ser Ser Ser Arg Leu Ile Tyr His Val Leu
245                 250                 255

tggtctatat gacttcttcc aggagggcct aatacacagg acgaagaagg cttcaaaaag    880

tcccaaacca agacaacatg tacataaaga tttcttttca gttgtaaatt tgtaaagatt    940

accttgccac tttataagaa agtgtattta actaaaaagt catcattgca aataatactt   1000

tcttcttctt tattattctt tgcttagata ttaatacata gttccagtaa tactatttct   1060

gataggggge cattgattga gggtagcttg ttcgaatgct taacttatat atacatatat   1120

atatattata aatattgctc atcaaaatgt ctctggtgtt tagagcttta ttttttttctt  1180

taaaacatta aaacagctga gaatcagtta aatggaattt taaatatatt taactatttc   1240

ttttctcttt aatcctttag ttatattgta ttaaataaaa atataatact gcctaatgta   1300
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tatattttga tcttttcttg taagaaatgt atcttttaaa tgtaagcaca aaatagtact 1360

ttgtggatca tttcaagata taagaaattt tggaaattcc accataaata aaatttttta 1420

ctacaag 1427

<210> 12
<211> 255
<212> PRT
<213> Homo sapiens;

<400> 12

Met Asp Val Met Asp Gly Cys Gln Phe Ser Pro Ser Glu Tyr Phe Tyr
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Asp Gly Ser Cys Ile Pro Ser Pro Glu Gly Glu Phe Gly Asp Glu Phe
20 25 30

Val Pro Arg Val Ala Ala Phe Gly Ala His Lys Ala Glu Leu Gln Gly
35 40 45

Ser Asp Glu Asp Glu His Val Arg Ala Pro Thr Gly His His Gln Ala
50 55 60

Gly His Cys Leu Met Trp Ala Cys Lys Ala Cys Lys Arg Lys Ser Thr
65 70 75 80

Thr Met Asp Arg Arg Lys Ala Ala Thr Met Arg Glu Arg Arg Arg Leu
85 90 95

Lys Lys Val Asn Gln Ala Phe Glu Thr Leu Lys Arg Cys Thr Thr Thr
100 105 110

Asn Pro Asn Gln Arg Leu Pro Lys Val Glu Ile Leu Arg Asn Ala Ile
115 120 125

Arg Tyr Ile Glu Ser Leu Gln Glu Leu Leu Arg Glu Gln Val Glu Asn
130 135 140

Tyr Tyr Ser Leu Pro Gly Gln Ser Cys Ser Glu Pro Thr Ser Pro Thr
145 150 155 160

Ser Asn Cys Ser Asp Gly Met Pro Glu Cys Asn Ser Pro Val Trp Ser
165 170 175

Arg Lys Ser Ser Thr Phe Asp Ser Ile Tyr Cys Pro Asp Val Ser Asn
180 185 190

Val Tyr Ala Thr Asp Lys Asn Ser Leu Ser Ser Leu Asp Cys Leu Ser
195 200 205

Asn Ile Val Asp Arg Ile Thr Ser Ser Glu Gln Pro Gly Leu Pro Leu
210 215 220

Gln Asp Leu Ala Ser Leu Ser Pro Val Ala Ser Thr Asp Ser Gln Pro
225 230 235 240

Arg Thr Pro Gly Ala Ser Ser Ser Arg Leu Ile Tyr His Val Leu
245 250 255

<210> 13
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<223>

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<309> 2003-05-13
<313> (1)..(675)

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Met Glu Leu Tyr Glu Thr Ser Pro Tyr Phe Tyr Gln Glu Pro Arg Phe

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1               5                  10                  15

tat gat ggg gaa aac tac ctg cct gtc cac ctc cag ggc ttc gaa cca      96
Tyr Asp Gly Glu Asn Tyr Leu Pro Val His Leu Gln Gly Phe Glu Pro
            20                  25                  30

cca ggc tac gag cgg acg gag ctc acc ctg agc ccc gag gcc cca ggg     144
Pro Gly Tyr Glu Arg Thr Glu Leu Thr Leu Ser Pro Glu Ala Pro Gly
        35                  40                  45

ccc ctt gag gac aag ggg ctg ggg acc ccc gag cac tgt cca ggc cag     192
Pro Leu Glu Asp Lys Gly Leu Gly Thr Pro Glu His Cys Pro Gly Gln
    50                  55                  60

tgc ctg ccg tgg gcg tgt aag gtg tgt aag agg aag tcg gtg tcc gtg     240
Cys Leu Pro Trp Ala Cys Lys Val Cys Lys Arg Lys Ser Val Ser Val
65                  70                  75                  80

gac cgg cgg cgg cgg gcg gcc aca ctg agg gag aag cgc agg ctc aag aag  288
Asp Arg Arg Arg Arg Ala Ala Thr Leu Arg Glu Lys Arg Arg Leu Lys Lys
                85                  90                  95

gtg aat gag gcc ttc gag gcc ctg aag aga agc acc ctg ctc aac ccc     336
Val Asn Glu Ala Phe Glu Ala Leu Lys Arg Ser Thr Leu Leu Asn Pro
            100                 105                 110

aac cag cgg ctg ccc aag gtg gag atc ctg cgc agt gcc atc cag tac     384
Asn Gln Arg Leu Pro Lys Val Glu Ile Leu Arg Ser Ala Ile Gln Tyr
        115                 120                 125

atc gag cgc ctc cag gcc ctg ctc agc tcc ctc aac cag gag gag cgt     432
Ile Glu Arg Leu Gln Ala Leu Leu Ser Ser Leu Asn Gln Glu Glu Arg
    130                 135                 140

gac ctc cgc tac cgg ggc ggg ggc ggg ccc cag cca ggg gtg ccc agc     480
Asp Leu Arg Tyr Arg Gly Gly Gly Gly Pro Gln Pro Gly Val Pro Ser
145                 150                 155                 160

gaa tgc agc tct cac agc gcc tcc tgc agt cca gag tgg ggc agt gca     528
Glu Cys Ser Ser His Ser Ala Ser Cys Ser Pro Glu Trp Gly Ser Ala
                165                 170                 175

ctg gag ttc agc gcc aac cca ggg gat cat ctg ctc acg gct gac cct     576
Leu Glu Phe Ser Ala Asn Pro Gly Asp His Leu Leu Thr Ala Asp Pro
            180                 185                 190

aca gat gcc cac aac ctg cac tcc ctc acc tcc atc gtg gac agc atc     624
Thr Asp Ala His Asn Leu His Ser Leu Thr Ser Ile Val Asp Ser Ile
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195 200 205

aca gtg gaa gat gtg tct gtg gcc ttc cca gat gaa acc atg ccc aac 672
Thr Val Glu Asp Val Ser Val Ala Phe Pro Asp Glu Thr Met Pro Asn
210 215 220

tag 675

<210> 14
<211> 224
<212> PRT
<213> Homo sapiens;

<400> 14

Met Glu Leu Tyr Glu Thr Ser Pro Tyr Phe Tyr Gln Glu Pro Arg Phe
1 5 10 15

Tyr Asp Gly Glu Asn Tyr Leu Pro Val His Leu Gln Gly Phe Glu Pro
20 25 30

Pro Gly Tyr Glu Arg Thr Glu Leu Thr Leu Ser Pro Glu Ala Pro Gly
35 40 45

Pro Leu Glu Asp Lys Gly Leu Gly Thr Pro Glu His Cys Pro Gly Gln
50 55 60

Cys Leu Pro Trp Ala Cys Lys Val Cys Lys Arg Lys Ser Val Ser Val
65 70 75 80

Asp Arg Arg Arg Ala Ala Thr Leu Arg Glu Lys Arg Arg Leu Lys Lys
85 90 95

Val Asn Glu Ala Phe Glu Ala Leu Lys Arg Ser Thr Leu Leu Asn Pro
100 105 110

Asn Gln Arg Leu Pro Lys Val Glu Ile Leu Arg Ser Ala Ile Gln Tyr
115 120 125

Ile Glu Arg Leu Gln Ala Leu Leu Ser Ser Leu Asn Gln Glu Glu Arg
130 135 140

Asp Leu Arg Tyr Arg Gly Gly Gly Gly Pro Gln Pro Gly Val Pro Ser
145 150 155 160

Glu Cys Ser Ser His Ser Ala Ser Cys Ser Pro Glu Trp Gly Ser Ala
165 170 175

Leu Glu Phe Ser Ala Asn Pro Gly Asp His Leu Leu Thr Ala Asp Pro
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Thr Val Glu Asp Val Ser Val Ala Phe Pro Asp Glu Thr Met Pro Asn
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